Credit Name: CSE 2120 Data Structures 1
Assignment Name: Evens And Odds Mastery
How has your program changed from planning to coding to now? Please explain?

PLANNING:

I plan to create an array to store 25 numbers, generate 25 random numbers from range 1-100, and store these numbers in the array. Then, I will calculate if the numbers are even or odd by seeing if they have a remainder when divided by 2. If there is a remainder, the number is odd, and if there isn't a remainder, the number is even.

CODING:

1.

```
/creating array to store 25 random numbers
   int[] nums = new int[25];

   // setting the min and max limit for the random nums
   // setting range inside the min of 1, and max of 100
   final int minimum = 0;
   final int maximum = 99;
   final int RangeNums = maximum - minimum +1;
```

Created array to store 25 numbers
Set the min to 0, max to 99, and created a range 1 - 100. This range will be used when generating the random numbers.

2.

```
  //generating the 25 random numbers from range 1-100
  // assigning the 25 nums into the array
  for (int i = 0; i<25; i++) {
      nums [i] = (int) (Math.random() * RangeNums);
  }
```

The for loop creates 25 random numbers, using the range created in the previous step. These 25 numbers are then stored in the nums array I created.

3.

```
   //print even nums
   //if statement checks to see which of the
   System.out.println("Even Numbers: ");
   for ( int i = 0; i<25; i++) {
       if ((nums[i] % 2 ) == 0) {
           System.out.print( nums[i]+ " ");
           System.out.print("");
       }
   }
```

This for loop is used to determine the even numbers out of the total 25 numbers. If any of the 25 numbers are divisible by 2 with no remainder, they are even numbers, and they get printed. ‘

4.

```
////if statement checks to see which of
System.out.println("Odd Numbers: ");
for ( int i = 0; i<25; i++) {
    if ((nums[i] % 2 ) != 0) {
        System.out.print(nums[i]+ " ");
        System.out.print("");
    }
}
```

This for loop is used to determine the oddnumbers out of the total 25 numbers. If any of the 25 numbers are not perfectly divisible by two and they have a remainder, they are odd numbers, and they get printed.

End Of Program!